having a wave-length in the range of 400 to 800 nM and said photovoltaic cells being interconnected by conductors that have been soldered in place using an acidic flux, the improvement wherein said light-transmitting encapsulant is a zinc ionomer that comprises an ethylene-methacrylic acid copolymer or an ethylene-acrylic acid copolymer and has the properties set forth in Tables I and II, and further wherein said ionomer is combined with 0.3 to 1.0 wt. % of a UV light absorber and 0.3 to 1.0 wt % light stabilizer.

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24. (Unamended) A photovoltaic module according to claim 23 wherein said zinc ionomer absorbs no more than about 0.3 wt % water.

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27. (Amended) A photovoltaic module that exhibits no loss in electrical photovoltaic performance after 1000 hours of exposure to 85% RH/85°C damp heat and after 20 cycles of change of conditions between 85%RH/85°C and 0%RH/-40°C, said module comprising a transparent front support sheet made of a CeO-free glass that is transparent to radiation having a wave-length in the range of 400 to 800 nM, a back sheet, an array of photovoltaic cells disposed between said front support sheet and said back sheet, a plurality of electrical conductors extending between said cells, said electrical conductors being physically and electrically coupled to said photovoltaic cells by solder connections, and an encapsulant extending between and bonded to said front support sheet and said back sheet and surrounding and bonded to said cells and said conductors, characterized in that an acidic flux residue is present at one or more of said solder connections, and said encapsulant is a zinc ionomer that is comprises an ethylene-methacrylic acid copolymer or an ethylene-acrylic acid copolymer and is combined with 0.3 to 1.0 wt. % of a compound that is a UV light absorber and 0.3 to 1.0 wt. % of a compound that is a UV light stabilizer, said zinc ionomer being substantially inert with respect to reaction with said acid flux residue, and having a melt flow index of 5.5 dg/min., a melt point of 95°C, a Vicat softening point of 65°C, a freeze point of 61°C, a density of 0.95 g/cc, an ultimate tensile strength of 5300

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psi (MD) and 5100 psi (TD), a secant modulus of 35,000 psi (MD) and 34,000 (TD), and a maximum water absorption of 0.3 wt. %.

29. (Unamended) A photovoltaic module according to claim 27 wherein said photovoltaic cells are thin film photovoltaic cells that are coupled to one another by monolithic connections.

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30. (Amended) A photovoltaic module according to claim 29 characterized by cadmium telluride or CIGS photovoltaic cells.

PLEASE ADD THE FOLLOWING NEW CLAIMS:

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36. A photovoltaic module according to claim 27 wherein said UV light stabilizer is 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol.

37. A photovoltaic module according to claim 36 wherein said UV light absorber is poly[[6-[(1, 1, 3, 3-tetramethylbutyl)amino]-1, 3, 5-triazine-2, 4-diyl] [2, 2, 6, 6-tetramethyl-4-piperidiny) imino]-1,6-hexanediy [(2, 2, 6, 6-tetramethyl-4-piperidiny) imino]].

38. A photovoltaic module that exhibits no loss in electrical photovoltaic performance after 1000 hours of exposure to 85% RH/85ºC damp heat and after 20 cycles of change of conditions between 85%RH/85°C and 0%RH/-40°C, said module comprising a transparent front support sheet made of glass that is transparent to radiation having a wave-length in the range of 400 to 800 nM, a back sheet, an array of photovoltaic cells disposed between said front support sheet and said back sheet, a plurality of electrical conductors extending between said cells, said electrical conductors being physically and electrically coupled to said photovoltaic cells by solder connections, and an ionomer encapsulant extending between and bonded to said front support sheet and said back sheet and surrounding and bonded to said cells and said conductors, characterized in

that an acidic flux residue is present at one or more of said solder connections, and said ionomer is a zinc ionomer that comprises a copolymer of ethylene-methacrylic acid or a copolymer of ethylene-acrylic acid, is substantially inert with respect to reaction with said acid flux residue, and has the following properties: a melt flow index of 5.5 dg/min., a melt point of 95°C, a freeze point of 61°C, a Vicat softening point of 65°C, a density of 0.95 g/cc, an ultimate tensile strength of 5300 psi (MD) and 5100 psi (TD), a secant modulus of 35,000 psi (MD) and 34,000 (TD), and a maximum water absorption of 0.3 wt. %.

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39. A method of manufacturing a photovoltaic module comprising the steps of:

(a) providing one or more strings of electrically interconnected photovoltaic cells, each photovoltaic cell having a front light-receiving surface and a rear surface with first and second contacts attached to said front and rear surfaces respectively, and said photovoltaic cells being interconnected by conductors that have been soldered in place using an acidic flux;

(b) providing front and back support sheets with said front support sheet being made of transparent CeO-free glass;

(c) providing at least one sheet of an encapsulating material comprising a zinc ionomer and 0.3 to 1.0 wt. % of a UV light absorber and 0.3 to 1.0 wt. % of a UV light stabilizer, said zinc ionomer comprising an ethylene-methacrylic acid copolymer or an ethylene-acrylic acid copolymer and having the following properties: a melt flow index of 5.5 dg/min., a melt point of about 95°C, a freeze point of 61°C, a Vicat softening point of 65°C, a density of 0.95 g/cc, an ultimate tensile strength of 5300 psi (MD) and 5100 psi (TD), a secant modulus of 35,000 psi (MD) and 34,000 (TD), and a maximum water absorption of 0.3 wt. %;

(d) placing said at least one sheet of encapsulating material in overlying relation with one surface of said front support sheet;

(e) placing said one or more strings of photovoltaic cells in overlying relation with at least one sheet of encapsulating material;

(f) placing a sheet of scrim in overlying relation with said one or more strings of photovoltaic cells;

(g) covering said sheet of scrim with one or more additional sheets of said encapsulating material;

(h) placing said back support sheet in overlying relation with said one or more additional sheets of said encapsulating material;

(i) heating the resulting assembly of said front and back support sheets, said sheets of said encapsulating material and said one or more strings of photovoltaic cells to a temperature in the range of about 120°C to about 130°C and compressing said components together under a pressure in the range of about 390 to about 400 torr, so as to cause said sheets of encapsulating material to soften enough to encapsulate said photovoltaic cells and conductors; and

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(j) cooling said assembly so as to cause said encapsulating material to form a solid bond to said photovoltaic cells, conductors, scrim and front and rear support sheets, whereby to produce a laminated module.

40. A method according to claim 39 wherein said UV light stabilizer is 2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol.

41. A method according to claim 40 wherein said UV light absorber is poly[[6-[(1, 1, 3, 3-tetramethylbutyl)amino]-1, 3, 5-triazine-2, 4-diyl] [2, 2, 6, 6-tetramethyl-4-piperidiny) imino]-1,6-hexanediy [(2, 2, 6, 6-tetramethyl-4-piperidiny) imino]].